

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-8 (canceled).

9. (currently amended) In a wireless communication system comprising a base station connected with a mobile unit, a method of detecting a mobile unit by at least one other base station which is waiting for the mobile unit to enter its coverage area, comprising:

transferring to the at least one base station waiting for the mobile unit to enter its coverage area timing information identifying a time interval;

from the at least one base station waiting for the mobile unit to enter its coverage area, sending at least one PING command to the mobile unit during said time interval;

at the base station waiting for the mobile unit to enter its coverage area, receiving at least one ECHO reply from the mobile unit; and

at each base station, maintaining information about connections between mobile units and neighboring base stations, wherein the information is selected from a group consisting of connection number, handset ID, base station ID, handoff status and handset detection status;

wherein the mobile unit is a device selected from a group consisting of:

telephone handset, standard cordless telephone handset, cellular telephone handset, personal data

device, personal digital assistant (PDA), computer, laptop computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

~~Method according to claim 8~~, wherein the handset detection status information comprises information selected from the group consisting of number of successful PINGs, time of last successful PING, quality measurements for successful PINGs.

Claims 10-17 (**canceled**).

18. (**currently amended**) In a wireless communication system comprising a base station connected with a mobile unit, a method of detecting a mobile unit by at least one base station which is waiting for the mobile unit to enter its coverage area, comprising:

from the base station connected with the mobile unit, sending at least one PING command to the mobile unit during a time interval;

transferring to the base station waiting for the mobile unit to enter its coverage area timing information identifying said time interval;

based on said timing information, at the base station waiting for the mobile unit to enter its coverage area, receiving an ECHO reply from the mobile unit in response to said PING command; and

at each base station, maintaining information about connections between mobile units and neighboring base stations,

wherein the information is selected a group consisting of:

connection number, handset ID, base station ID, handoff status and handset detection status;

wherein the mobile unit is a device selected from a group consisting of:

telephone handset, standard cordless telephone handset, cellular telephone handset, personal data device, personal digital assistant (PDA), computer, laptop computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player,

~~Method, according to claim 17, wherein the handset detection status information comprises information selected from the group consisting of number of successful PINGs, time of last successful PING, quality measurements for successful PINGs;~~

Claims 19-31 (canceled).

32. (currently amended) A wireless communication system comprising:

a first base station able to communicate with a mobile unit; and

a second base station waiting for the mobile unit to enter its coverage area, said second base station able to receive timing information identifying a timing of a time interval yielded by said first base station, to send at least one PING command to said mobile unit during said time interval, and to receive at least one ECHO reply from said mobile unit,

wherein the mobile unit is a device selected from [[the]] a group consisting of a

telephone handset, a standard cordless telephone handset, a cellular telephone handset, a personal data device, a personal digital assistant (PDA), a computer, a laptop computer, an e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player,

wherein each one of said first and second base stations is able to maintain information about connections between mobile units and neighboring Base Stations, wherein the information is selected from a group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status,

~~The wireless communication system of claim 31,~~ wherein the handset detection status information comprises information selected from ~~[[the]]~~ a group consisting of number of successful PINGs, time of last successful PING, quality measurements for successful PINGs.

Claims 33-39. **(canceled).**

40. **(currently amended)** A wireless communication system comprising:

a first base station connected to a mobile unit, and able to send at least one PING command to the mobile unit during a time interval; and

a second base station waiting for the mobile unit to enter its coverage area, said second base station able to receive timing information identifying said time interval, and based on said timing information, to receive from the mobile unit an ECHO reply in response to said PING command;

wherein the mobile unit is a device selected from a group consisting of a telephone handset, a standard cordless telephone handset, a cellular telephone handset, a personal data device, a personal digital assistant (PDA), a computer, a laptop computer, an e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player;

wherein each one of said first and second base stations is able to maintain information about connections between mobile units and neighboring Base Stations, wherein the information is selected from a group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status,

~~The wireless communication system of claim 39,~~ wherein the handset detection status information comprises information selected from ~~[[the]]~~ a group consisting of number of successful PINGs, time of last successful PING, quality measurements for successful PINGs.

Claims 41-42 **(canceled)**.